| | L # | Hits | Search Text | DBs | Time Stamp |
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| 1 | L37 | 26 | (dual adj specificity adj phosphatase$1) near6 human | USPAT; US-PGPUB | 2002/12/19 10:09 |

PGPUB-DOCUMENT-NUMBER: 20020182203

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: **US 20020182203 A1**

TITLE: DSP-15 dual-specificity phosphatase

PUBLICATION-DATE: December 5, 2002

INVENTOR-INFORMATION:

| NAME | CITY | STATE | COUNTRY | RULE-47 |
|---|---|---|---|---|
| Luche, Ralf M. | Seattle | WA | US | |
| Wei, Bo | Kirkland | WA | US | |


APPL-NO: 09/ 955732

DATE FILED: September 18, 2001

RELATED-US-APPL-DATA:

non-provisional-of-provisional 60233833 20000919 US

US-CL-CURRENT: 424/94.6,435/196 ,435/320.1 ,435/325 ,435/69.1 ,536/23.2

ABSTRACT:

Compositions and methods are provided for the treatment of conditions associated with cell proliferation, cell differentiation and cell survival. In particular, the dual-specificity phosphatase DSP-15, and polypeptide variants thereof that stimulate dephosphorylation of DSP-15 substrates, are provided. The polypeptides may be used, for example, to identify antibodies and other agents that inhibit DSP-15 activity. The polypeptides and agents may be used to modulate cell proliferation, differentiation and survival.

CROSS-REFERENCE TO RELATED APPLICATION

[0001] This application claims the benefit of U.S. Provisional Patent Application No. 60/233,833, filed Sep. 19, 2000, which is incorporated herein by reference in its entirety.

---------- KWIC ---------

Pre-Grant Publication Document Identifier - DID:

US 20020182203 A1

Detail Description Paragraph - DETX:

[0137] To derive a longer consensus DSP amino acid sequence motif that would be useful for the identification of new DSP family members, multiple known **human dual-specificity phosphatases** sequences were aligned and compared. An alignment of eight amino acid sequences derived from eight human DSPs having MAP-kinase phosphatase activity yielded a conserved homology region consisting of a 24-amino acid peptide sequence containing the PTP active site signature motif. Thus, a candidate peptide having the sequence:

PGPUB-DOCUMENT-NUMBER: 20020137170

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: **US 20020137170 A1**

TITLE: DSP-16 dual-specificity phosphatase

PUBLICATION-DATE: September 26, 2002


INVENTOR-INFORMATION:

| NAME | CITY | STATE | COUNTRY | RULE-47 |
|---|---|---|---|---|
| Luche, Ralf M. | Seattle | WA | US | |
| Wei, Bo | Kirkland | WA | US | |



APPL-NO: 09/ 964277

DATE FILED: September 25, 2001

RELATED-US-APPL-DATA:

non-provisional-of-provisional 60235487 20000926 US

US-CL-CURRENT: 435/196,435/320.1 ,435/325 ,435/69.1 ,536/23.2



ABSTRACT:

Compositions and methods are provided for the treatment of conditions associated with cell proliferation, cell differentiation and cell survival. In particular, the dual-specificity phosphatase DSP-16, and polypeptide variants thereof that stimulate dephosphorylation of DSP-16 substrates, are provided. The polypeptides may be used, for example, to identify antibodies and other agents that inhibit DSP-16 activity. The polypeptides and agents may be used to modulate cell proliferation, differentiation and survival.


CROSS-REFERENCE TO RELATED APPLICATION

[0001] This application claims the benefit of U.S. Provisional Patent Application No. 60/235,487 filed Sep. 26, 2000, which is incorporated herein by reference in its entirety.

---------- KWIC ---------

Pre-Grant Publication Document Identifier - DID:

US 20020137170 A1

Detail Description Paragraph - DETX:

[0143] To derive a longer consensus DSP amino acid sequence motif that would be useful for the identification of new DSP family members, multiple known **human dual-specificity phosphatases** sequences were aligned and compared. An alignment of eight amino acid sequences derived from eight human DSPs having MAP-kinase phosphatase activity yielded a conserved homology region consisting of a 24-amino acid peptide sequence containing the PTP active site signature motif. Thus, a candidate peptide having the sequence:

PGPUB-DOCUMENT-NUMBER: 20020123464

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: **US 20020123464 A1**

TITLE: 69087, 15821, and 15418, methods and compositions of human proteins and uses thereof

PUBLICATION-DATE: September 5, 2002

INVENTOR-INFORMATION:

| NAME | CITY | STATE | COUNTRY | RULE-47 |
|---|---|---|---|---|
| Kapeller-Libermann, Rosana | Chestnut Hill | MA | US | |
| Bandaru, Rajasekhar | Watertown | MA | US | |


APPL-NO: 10/ 044205

DATE FILED: October 22, 2001

RELATED-US-APPL-DATA:

non-provisional-of-provisional 60242428 20001023 US
non-provisional-of-provisional 60241884 20001019 US
non-provisional-of-provisional 60241877 20001020 US

US-CL-CURRENT: 514/12,435/320.1 ,435/325 ,435/69.1 ,530/350 ,536/23.5

ABSTRACT:

The invention provides isolated nucleic acids molecules, including 69087 nucleic acid molecules, which encode a novel G protein coupled receptor kinase, 15821 nucleic acid molecules, which encode a novel nuclear signaling protein, and 15418 nucleic acid molecules, which encode a mitogen-activated protein kinase phosphatase. The invention also provides antisense nucleic acid molecules, recombinant expression vectors containing 69087, 15821, or 15418 nucleic acid molecules, host cells into which the expression vectors have been introduced, and non-human transgenic animals in which a 69087, 15821, or 15418 gene has been introduced or disrupted. The invention still further provides isolated 69087, 15821, and 15418 proteins, fusion proteins, antigenic peptides and anti-69087, anti-15821, and anti-15418 antibodies. Diagnostic methods utilizing compositions of the invention are also provided.

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] This application is entitled to priority pursuant to 35 U.S.C. .sctn. 119(e) to U.S. provisional patent application 60/242,428 which was filed on Oct. 23, 2000, to U.S. provisional patent application 60/241,884 which was filed on Oct. 20, 2000, and to U.S. provisional patent application 60/241,877

which was filed on Oct. 20, 2000.

---------- KWIC ----------

Pre-Grant Publication Document Identifier - DID:

US 20020123464 A1

Detail Description Paragraph - DETX:

[0180] **Human 15418 contains a predicted dual specificity phosphatase** catalytic domain (PF00782) at about amino acid residues 21-159 of SEQ ID NO: 42 and a predicted tyrosine specific protein phosphatase active site (Pfam accession number PS00383) at residues 104-116 of SEQ ID NO: 42.

PGPUB-DOCUMENT-NUMBER: 20020102693

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: **US 20020102693 A1**

TITLE: DSP-14 dual-specificity phosphatase

PUBLICATION-DATE: August 1, 2002

INVENTOR-INFORMATION:

| NAME | CITY | STATE | COUNTRY | RULE-47 |
|---|---|---|---|---|
| Luche, Ralf M. | Seattle | WA | US | |

APPL-NO: 09/ 847519

DATE FILED: May 1, 2001

RELATED-US-APPL-DATA:

non-provisional-of-provisional 60201322 20000502 US

US-CL-CURRENT: 435/196,435/320.1 ,435/325 ,435/69.1 ,536/23.2

ABSTRACT:

Compositions and methods are provided for the treatment of conditions associated with cell proliferation, cell differentiation and cell survival. In particular, the dual-specificity phosphatase DSP-14, and polypeptide variants thereof that stimulate dephosphorylation of DSP-14 substrates, are provided. The polypeptides may be used, for example, to identify antibodies and other agents that inhibit DSP-14 activity. The polypeptides and agents may be used to modulate cell proliferation, differentiation and survival.

CROSS-REFERENCE TO RELATED APPLICATION

[0001] This application claims the benefit of Provisional Application No. 60/201,322, filed May 2, 2000, which application is incorporated herein by reference in its entirety.

---------- KWIC ---------

Pre-Grant Publication Document Identifier - DID:

US 20020102693 A1

Detail Description Paragraph - DETX:

[0126] A conserved sequence motif surrounding the active site domain of dual-specificity phosphatases was identified as follows: Dual specificity phosphatases belong to the larger family of protein tyrosine phosphatases (PTPs) that share a conserved catalytic domain containing a cysteine residue situated N-terminal to a stretch of five variable amino acids followed by an arginine residue (Fauman et al., Trends In Bioch. Sci. 21:413-417, 1996). DSPs typically contain a PTP active site motif but lack sequence homology to PTPs in other regions (Jia, Biochem. and Cell Biol. 75:17-26, 1997). There is, however, no reported consensus sequence that is conserved among DSPs, nor is a consensus region apparent from examination of the known DSP sequences such as those referred to above. To derive a longer consensus DSP amino acid sequence motif that would be useful for the identification of new DSP family members, multiple known **human dual-specificity phosphatases** sequences were aligned and compared. An alignment of eight amino acid sequences derived from eight human DSPs having MAP-kinase phosphatase activity yielded a conserved homology region consisting of a 24-amino acid peptide sequence containing the PTP active site signature motif. Thus, a candidate peptide having the sequence:

PGPUB-DOCUMENT-NUMBER: 20020094561

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: **US 20020094561 A1**

TITLE: Isolated human phosphatase proteins, nucleic acid molecules encoding human phosphatase proteins, and uses thereof

PUBLICATION-DATE: July 18, 2002

INVENTOR-INFORMATION:

| NAME | CITY | STATE | COUNTRY | RULE-47 |
|---|---|---|---|---|
| Ye, Jane | Boyds | MD | US | |
| Yan, Chunhua | Boyds | MD | US | |
| Di Francesco, Valentina | Rockville | MD | US | |
| Beasley, Ellen M. | Darnestown | MD | US | |


APPL-NO: 09/ 738885

DATE FILED: December 18, 2000

US-CL-CURRENT: 435/196,435/325 ,435/6 ,435/69.1 ,435/7.1 ,536/23.2 ,800/8

ABSTRACT:

The present invention provides amino acid sequences of peptides that are encoded by genes within the human genome, the phosphatase peptides of the present invention. The present invention specifically provides isolated peptide and nucleic acid molecules, methods of identifying orthologs and paralogs of the phosphatase peptides, and methods of identifying modulators of the phosphatase peptides.

---------- KWIC ---------

Pre-Grant Publication Document Identifier - DID:

US 20020094561 A1

Summary of Invention Paragraph - BSTX:

[0002] Phosphatase proteins, particularly members of the dual-specificity phosphatase subfamily, are a major target for drug action and development. Accordingly, it is valuable to the field of pharmaceutical development to identify and characterize previously unknown members of this subfamily of phosphatase proteins. The present invention advances the state of the art by providing a previously unidentified **human phosphatase proteins that have**

**homology to members of the dual-specificity phosphatase** subfamily.

Summary of Invention Paragraph - BSTX:

[0022] The present invention is based in part on the identification of amino acid sequences of **human phosphatase peptides and proteins that are related to the dual-specificity phosphatase** subfamily, as well as allelic variants and other mammalian orthologs thereof. These unique peptide sequences, and nucleic acid sequences that encode these peptides, can be used as models for the development of human therapeutic targets, aid in the identification of therapeutic proteins, and serve as targets for the development of human therapeutic agents that modulate phosphatase activity in cells and tissues that express the phosphatase. Experimental data as provided in FIG. 1 indicates expression in humans in the brain (including neuroblastomas, anaplastic dendrogliomas, infant and fetal brain), colon, lung small cell carcinomas, and fetal heart.

Detail Description Paragraph - DETX:

[0027] The present invention is based on the sequencing of the human genome. During the sequencing and assembly of the human genome, analysis of the sequence information revealed previously unidentified fragments of the human genome that encode peptides that share structural and/or sequence homology to protein/peptide/domains identified and characterized within the art as being a phosphatase protein or part of a phosphatase protein and are related to the dual-specificity phosphatase subfamily. Utilizing these sequences, additional genomic sequences were assembled and transcript and/or cDNA sequences were isolated and characterized. Based on this analysis, the present invention provides amino acid sequences of **human phosphatase peptides and proteins that are related to the dual-specificity phosphatase** subfamily, nucleic acid sequences in the form of transcript sequences, cDNA sequences and/or genomic sequences that encode these phosphatase peptides and proteins, nucleic acid variation (allelic information), tissue distribution of expression, and information about the closest art known protein/peptide/domain that has structural or sequence homology to the phosphatase of the present invention.

PGPUB-DOCUMENT-NUMBER: 20020090703

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: **US 20020090703 A1**

TITLE: Mammalian protein phosphatases

PUBLICATION-DATE: July 11, 2002

INVENTOR-INFORMATION:

| NAME | CITY | STATE | COUNTRY | RULE-47 |
|---|---|---|---|---|
| Plowman, Gregory D. | San Carlos | CA | US | |
| Martinez, Ricardo | Foster City | CA | US | |
| Whyte, David | Belmont | CA | US | |
| Manning, Gerard | Menlo Park | CA | US | |
| Sudarsanam, Sucha | Greenbrae | CA | US | |
| Caenepeel, Sean | Oakland | CA | US | |
| Hill, Ron | Burlingame | CA | US | |
| Flanagan, Peter | San Francisco | CA | US | |


APPL-NO: 09/ 866987

DATE FILED: May 30, 2001

RELATED-US-APPL-DATA:

non-provisional-of-provisional 60208291 20000530 US

US-CL-CURRENT: 435/196,435/320.1 ,435/325 ,435/69.1 ,536/23.2

ABSTRACT:

The present invention relates to phosphatase polypeptides, nucleotide sequences encoding the phosphatase polypeptides, as well as various products and methods useful for the diagnosis and treatment of various phosphatase-related diseases and conditions. Through the use of a bioinformatics strategy, mammalian members of the MAP kinase phosphatase PTP's and STP's have been identified and their protein structure predicted.

[0001] The present invention claims priority to provisional application Ser. No. 60/208,291, filed May 30, 2000, which is hereby incorporated by reference in its entirety.

---------- KWIC ---------

Pre-Grant Publication Document Identifier - DID:

US 20020090703 A1

Detail Description Paragraph - DETX:

[0165] SGP061, SEQ ID NO: 2 is a novel MKP-like phosphatase. The **dual specificity phosphatase family includes around 20 known human** members (for a list, see http://smart.embl-heidelberg.de/smart/get_members.pl?WHA-T=species&NAME=DSPc&WHICH=Ho mo_sapiens ). Well-known members of the MPK family of dual-specificity phosphatases include: DUS1 (also known as MPK-1, CL100, PTPN-10, erp, VH1 or 3CH134), DUS3 (also known as VHR), DUS4 (also known as HVH2, TYP1, MKP2 or VH2), DUS5 (also known as HVH3, B23, VH3), DUS6 (also known as PYST1, MKP3, rVH6), DUS7 (also known as PYST2), CDKN3 (also known as CDKN3, KAP, CIP2 or CDI1), VH5 and STYX.

PGPUB-DOCUMENT-NUMBER: 20020090624

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: **US 20020090624 A1**

TITLE: Gene markers useful for detecting skin damage in response to ultraviolet radiation

PUBLICATION-DATE: July 11, 2002

INVENTOR-INFORMATION:

| NAME | CITY | STATE | COUNTRY | RULE-47 |
|---|---|---|---|---|
| Blumenberg, Miroslav | New York | NY | US | |


APPL-NO: 09/ 947870

DATE FILED: September 6, 2001

RELATED-US-APPL-DATA:

non-provisional-of-provisional 60231454 20000908 US

US-CL-CURRENT: 435/6

ABSTRACT:

The cellular response to ultraviolet radiation exposure has been characterized on the molecular level through the use of high density gene array technology. Nucleic acid molecules and protein molecules, the expression of which are repressed or induced in response to ultraviolet radiation exposure, are identified according to a temporal pattern of altered expression post ultraviolet radiation exposure. Methods are disclosed that utilized these ultraviolet radiation-regulated molecules as markers for ultraviolet radiation exposure. Other screening methods of the invention are designed for the identification of compounds that modulate the response of a cell to ultraviolet radiation exposure. The invention also provides compositions useful for drug screening or pharmaceutical purposes.

---------- KWIC ---------

Pre-Grant Publication Document Identifier - DID:

US 20020090624 A1

Detail Description Paragraph - DETX:

[0268] Most intracellular signaling processes involve protein phosphorylation and, therefore, protein kinases and phosphatases are among the regulated genes (Table 3). The **dual specificity phosphatase CL100, which is the human** homolog of murine MKPI that plays a role in shutting down the ultraviolet radiation-mediated signal transduction, is also induced by ultraviolet radiation (Hirsch et al. (1997) J. Biol. Chem. 272:4568-4575). Ultraviolet radiation induces at various time points three RING3 family proteins, MAPKAP kinase (3 pK) and cystic fibrosis antigen, which is a protein kinase inhibitor. On the other hand, the following kinases are suppressed at various time points: G protein-coupled receptor kinase GRK6, Ser/Thr protein kinase (A-Raf-1), casein kinases CKI-.alpha. and CKII-.alpha., ERK3, LIMK-2, testis-specific protein kinase .alpha.-subunit, H-pim-1 and a raf related protein pks/a-raf. Also suppressed are the phosphatases PP2A,-C.alpha., PPI.gamma. and PTP1.

PGPUB-DOCUMENT-NUMBER: 20020065406

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: **US 20020065406 A1**

TITLE: 18221, a novel dual specificity phosphatase and uses thereof

PUBLICATION-DATE: May 30, 2002

INVENTOR-INFORMATION:

| NAME | CITY | STATE | COUNTRY | RULE-47 |
|---|---|---|---|---|
| Meyers, Rachel A. | Newton | MA | US | |

APPL-NO: 09/ 815419

DATE FILED: March 22, 2001

RELATED-US-APPL-DATA:

non-provisional-of-provisional 60191858 20000324 US

US-CL-CURRENT: 536/23.1,435/196 ,435/6

ABSTRACT:

The invention provides isolated nucleic acids molecules, designated 18221 nucleic acid molecules, which encode novel dual specificity phosphatase family members. The invention also provides antisense nucleic acid molecules, recombinant expression vectors containing 18221 nucleic acid molecules, host cells into which the expression vectors have been introduced, and nonhuman transgenic animals in which a 18221 gene has been introduced or disrupted. The invention still further provides isolated 18221 proteins, fusion proteins, antigenic peptides and anti-18221 antibodies. Diagnostic methods utilizing compositions of the invention are also provided. The invention also provides methods of modulating the differentiation and proliferation of hematopoietic cells (e.g., erythroid cells) utilizing the compositions of the invention. Accordingly, methods of treating, preventing and/or diagnosing hematopoietic disorders are disclosed.

RELATED APPLICATION

[0001] This application claims priority to U.S. provisional application No. 60/191,858 filed on Mar. 24, 2000, the contents of which are incorporated herein by reference.

---------- KWIC ---------

Pre-Grant Publication Document Identifier - DID:

US 20020065406 A1

Brief Description of Drawings Paragraph - DRTX:

[0086] FIGS. 3A-3B depict alignments of the **dual specificity phosphatase domain (dsp) of human** 18221 amino acid sequence with a consensus amino acid sequence derived from a hidden Markov model.

Detail Description Paragraph - DETX:

[0115] In a preferred embodiment, a 18221 polypeptide or protein has a "dual specificity phosphatase catalytic domain" or a region that includes at least about 50 to 200, preferably about 75 to 175, more preferably about 100 to 150, and even more preferably about 120 to 138 amino acid residues and has at least about 70% 80% 90% 95%, 99%, or 100% homology with a "dual specificity phosphatase catalytic domain," e.g., the **dual specificity phosphatase catalytic domain of human** 18221 (e.g., residues 65 to 203 of SEQ ID NO:2).

Detail Description Paragraph - DETX:

[0116] To identify the presence of a "dual specificity phosphatase catalytic domain" in a 18221 protein sequence and to make the determination that a polypeptide or protein of interest has a particular profile, the amino acid sequence of the protein can be searched against a database of HMMs (e.g., the Pfam database, release 2.1) using default parameters (http://www.sanger.ac.uk/Software/Pfam/HMM_search). For example, the hmmsf program, which is available as part of the HMMER package of search programs, is a family specific default program for MILPAT0063 and a score of 15 is the default threshold score for determining a hit. Alternatively, the threshold score for determining a hit can be lowered (e.g., to 8 bits). A description of the Pfam database can be found in Sonhammer et al. (1997) Proteins 28(3):405-420 and a detailed description of HMMs can be found, for example, in Gribskov et al. (1990) Meth. Enzymol. 183:146-159; Gribskov et al. (1987) Proc. Natl. Acad. Sci. USA 84:4355-4358; Krogh et al.(1994) J. Mol Biol. 235:1501-1531; and Stultz et al. (1993) Protein Sci. 2:305-314, the contents of which are incorporated herein by reference. A search was performed against the HMM database resulting in the identification of a "**dual specificity phosphatase catalytic domain" in the amino acid sequence of human** 18221 at about residues 65-203 of SEQ ID NO:2 (see FIG. 3A).

US-PAT-NO: **6492157**

DOCUMENT-IDENTIFIER: US 6492157 B1

TITLE: DSP-9 dual-specificity phosphatase

DATE-ISSUED: December 10, 2002

INVENTOR-INFORMATION:

| NAME | CITY | STATE | ZIP CODE | COUNTRY |
|---|---|---|---|---|
| Luche; Ralf M. | Seattle | WA | N/A | N/A |
| Wei; Bo | Kirkland | WA | N/A | N/A |


APPL-NO: 09/ 544716

DATE FILED: April 6, 2000

PARENT-CASE:

CROSS-REFERENCE TO RELATED APPLICATION This application claims the benefit of U.S. Provisional Patent Application No. 60/128,203 filed Apr. 7, 1999; where this provisional application is incorporated herein by reference in its entirety.

US-CL-CURRENT: 435/196; 435/252.3 ; 435/320.1 ; 435/325 ; 536/23.1 ; 536/23.2

ABSTRACT:

Compositions and methods are provided for the treatment of conditions associated with cells proliferation, cells differentiation and cell survival. In particular, the dual-specificity phosphatase DSP-9, and polypeptide variants thereof that stimulate dephosphorylation of DSP-9 substrates, are provided. The polypeptides may be used, for example, to identify antibodies and other agents that inhibit DSP-9 activity. The polypeptides and agents may be used to modulate cell proliferation, differentiation and survival.

9 Claims, 6 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 6

---------- KWIC ---------

US PATENT NO. - PN:

6492157

Detailed Description Text - DETX:

A conserved sequence motif surrounding the active site domain of dual-specificity phosphatases was identified as follows: Dual specificity phosphatases belong to the larger family of protein tyrosine phosphatases (PTPs) that share a conserved catalytic domain containing a cysteine residue situated N-terminal to a stretch of five variable amino acids followed by an arginine residue (Fauman et al., Trends In Bioch. Sci. 21:413-417, 1996). DSPs typically contain a PTP active site motif but lack sequence homology to PTPs in other regions (Jia, Biochem. and Cell Biol. 75:17-26, 1997). There is, however, no reported consensus sequence that is conserved among DSPs, nor is a consensus region apparent from examination of the known DSP sequences such as those referred to above. To derive a longer consensus DSP amino acid sequence motif that would be useful for the identification of new DSP family members, multiple known **human dual-specificity phosphatases** sequences were aligned and compared. An alignment of eight amino acid sequences derived from eight human DSPs having MAP-kinase phosphatase activity yielded a conserved homology region consisting of a 23-amino acid peptide sequence containing the PTP active site signature motif. Thus, a candidate peptide having the sequence: GRVLVHCQAGISRSGTNILAYLM SEQ ID NO:5 was used to search the Expressed Sequence Tag database (Nat. Center for Biol. Information, www.ncbi.nlm.nih.gov/dbEST). The search employed an algorithm (tblastn) capable of reverse translation of the candidate peptide with iterations allowing for genetic code degeneracy within default parameters. The search results identified the ESTs AI372800, F08410, AA191072, AA442393, AA194490 and AA019932 as candidate MAP-kinase phosphatase sequences. The ESTs did not include a complete coding region of an expressed gene such as a gene encoding a DSP-9 having MAP-kinase phosphatase activity, nor were the sense strand and open reading frame identified.

US-PAT-NO: **6485963**

DOCUMENT-IDENTIFIER: US 6485963 B1

TITLE: Growth stimulation of biological cells and tissue by electromagnetic fields and uses thereof

DATE-ISSUED: November 26, 2002

INVENTOR-INFORMATION:

| NAME | CITY | STATE | ZIP CODE | COUNTRY |
|---|---|---|---|---|
| Wolf; David A. | Houston | TX | N/A | N/A |
| Goodwin; Thomas J. | Friendswood | TX | N/A | N/A |


APPL-NO: 09/ 587028

DATE FILED: June 2, 2000

US-CL-CURRENT: 435/298.2; 435/299.1

ABSTRACT:

The present invention provides systems for growing two or three dimensional mammalian cells within a culture medium facilitated by an electromagnetic field, and preferably, a time varying electromagnetic field. The cells and culture medium are contained within a fixed or rotating culture vessel, and the electromagnetic field is emitted from at least one electrode. In one embodiment, the electrode is spaced from the vessel. The invention further provides methods to promote neural tissue regeneration by means of culturing the neural cells in the claimed system. In one embodiment, neuronal cells are grown within longitudinally extending tissue strands extending axially along and within electrodes comprising electrically conductive channels or guides through which a time varying electrical current is conducted, the conductive channels being positioned within a culture medium.

18 Claims, 12 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 11

---------- KWIC ---------

US PATENT NO. - PN:

6485963

Detailed Description Text - DETX:

Down Regulated Genes in Descending Order (Highest to lowest) 1. Homo sapiens (clone Zap2) mRNA fragment [Incyte PD:1661837] 2. CDC28 protein kinase 2[Incyte PD:1384823] 3. Synteni: YCFR 22 [YC 22.2000.W] 4. ESTs, Moderately similar to cell growth regulating nucleolar protein LYAR [M.musculus] [Incyte PD:2233551] 5. KERATIN, TYPE II CYTOSKELETAL 7 [Incyte PD:1649959] 6. MITOTTC KINESIN-LIKE PROTEIN-1 [Incyte PD:2640427] 7. EST [Incyte PD:674714] 8. Synteni: YCFR 22 [YC 22.2000.X] 9. Synteni: YCFR 26 [YC 26.0062.N] 10. Synteni: YCFR 22 [YC 22.2000.Z] 11. Transcription factor 6-like 1 (mitochondrial transcription factor 1-like) [Incyte PD:3371995] 12. Interferon-inducible 56-KDa protein [Incyte PD:1215596] 13. EST [Incyte PD:1794375] 14. Homo sapiens mitotic feedback control protein Madp2 homolog mRNA, complete cds [Incyte PD:2414624] 15. EST [Incyte PD:151026] 16. Homo sapiens Pig3 (PIG3) mRNA, complete cds [Incyte PD:2395269] 17. General transcription factor IIIA [Incyte PD:1527070] 18. Cellular retinoic acid-binding protein [human, skin, mRNA, 735 nt] [Incyte PD:585432] 19. EST [Incyte PD:1755159] 20. Homo sapiens mRNA for KIAA0285 gene, complete cds [Incyte PD:1738053] 21. ESTs, Weakly similar to F25H5.h [C.elegans] [Incyte PD:1923567] 22. Homo sapiens mRNA expressed in osteoblast, complete cds [Incyte PD:2537863] 23. EST [Incyte PD:3204745] 24. Homo sapiens mRNA for serine/threonine protein kinase SAK [Incyte PD:2732630] 25. Homo sapiens serum-inducible kinase mRNA, complete cds [Incyte PD:1255087] 26. Carbonic anhydrase II [Incyte PD:2474163] 27. EST [Incyte PD:660376] 28. GRANCALCIN [Incyte PD:1671852] 29. N-CHIMAERIN [Incyte PD:1852659] 30. Homo sapiens Pig10 (PIG10) M3RNA, complete cds [Incyte PD:1731061] 31. Adenylosuccinate lyase [Incyte PD:1653326] 32. EST [Incyte PD:1798393] 33. Homo sapiens HP protein (HP) mRNA, complete cds [Incyte PD:30841223] 34. ESTs, Moderately similar to T10C6[C.elegans] [Incyte PD:1923186] 35. Chromosome condensation 1 [Incyte PD:3180854] 36. Calmodulin 1 (phosphorylase kinase, delta) [Incyte PD:2803306] 37. Centromere protein A (17kD) [Incyte PD:2444942] 38. V-jun avian sarcoma virus 17 oncogene homolog [Incyte PD:1920177] 39. Human glutathione-S-transferase homolog mRNA, complete cds [Incyte PD:1862232] 40. Homo sapiens gene for protein involved in sexual development, complete cds [Incyte PD:3033934] 41. EST [Incyte PD:2630992] 42. Human low-Mr GTP-binding protein (RAB32) mRNA, partial cds [Incyte PD:1662688] 43. Annexin III (lipocortin III) [Incyte PD:1920650] 44. Hydroxymethylbilane synthase [Incyte PD:1509204] 45. Synteni: HK 4 [HK 4.2000.Y] 46. Ribosomal protein L7a [Incyte PD:2579602] 47. Human mRNA for myosin regulatory light chain [Incyte PD:78783] 48. Ferredoxin reductase [Incyte PD:1819763] 49. Human copper transport protein HAH1 (HAH1) mRNA, complete cds [Incyte PD:2313349] 50. Human G protein gamma-11 subunit mRNA, complete cds [Incyte PD:1988432] 51. Synteni: HK 4 [HK 4.2000.W] 52. Human XIST, coding sequence a mRNA (locus DXS399E) [Incyte PD:1514318] 53. Ribosomal protein, large, P0 [Incyte PD:3511355] 54. Homo sapiens clone 23714 mRNA sequence [Incyte PD:1728368] 55. Human mRNA for Apo1.sub.13 Human (MER5(Aop1-Mouse)like protein), complete cds [Incyte PD:2527879] 56. Synteni: HK 4 [HK 4.2000.Z] 57. Proteasome (prosome, macropain) subunit, beta type, 5 [Incyte PD:2503119] 58. Human PINCH protein mRNA, complete cds [Incyte PD:126888] 59. Homo sapiens peroxisome assembly protein PEX10 mRNA, complete cds [Incyte PD:998279] 60. Homo sapiens short chain L-3-hydroxyacyl-CoA dehydrogenase (SCHAD) mRNA, complete cds [Incyte PD:1638850] 61. Neuroblastoma RAS viral (v-ras) oncogene homolog [Incyte PD:2816984] 62. H.sapiens mRNA for b4 integrin interactor [Incyte PD:1932850]

63. Human forkhead protein FREAC-1 mRNA, complete cds [Incyte PD:1449920] 64. Human mRNA for protein D123, complete cds [Incyte PD:1920522] 65. H.sapiens mRNA for A-kinase anchoring protein AKAP95 [Incyte PD:1628787] 66. Carbonyl reductase [Incyte PD:1633249] 67. EST [Incyte PD:2060973] 68. ESTs, Highly similar to GUANINE NUCLEOTIDE-BINDING PROTEIN G(I)/G(S)/G(O) GAMMA-7 SUBUNIT [Rattus norvegicus] [Incyte PD:1640161] 69. Homo sapiens Na+/Ca+exchanger mRNA sequence [Incyte PD:2880435] 70. STRESS-ACTIVATED PROTEIN KINASE JNK1 [Incyte PD:3331719] 71. Homo sapiens leupaxin mRNA, complete cds [Incyte PD:1595756] 72. CLEAVAGE SIGNAL-1 PROTEIN [Incyte PD:2054053] 73. EST [Incyte PD:1798965] 74. Human DNA from overlapping chromosome 19 cosmids R31396, F2545 1, and R31076 containing COX6B and UPKA, genomic sequence [Incyte PD:1320685] 75. INTERFERON-INDUCED 17 KD PROTEIN [Incyte PD:2862971] 76. Human homolog of yeast IPP isomerase [Incyte PD:1526240] 77. Translation elongation factor 1 gamma [Incyte PD:3138196] 78. Tropomyosin alpha chain (skeletal muscle) [Incyte PD:1572555] 79. Aplysia ras-related homolog 9 [Incyte PD:2733928] 80. ATP SYNTHASE ALPHA CHAIN, MITOCHONDRIAL PRECURSOR [Incyte PD:3206210] 81. Homo
sapiens androgen receptor associated protein 24 (ARA24) mRNA, complete cds [Incyte PD:552654] 82. Glucagon [Incyte PD:1333075] 83. Human enhancer of rudimentary homolog mRNA, complete cds [Incyte PD:1704472] 84. TRANSCRIPTIONAL ENHANCER FACTOR TEF-1 [Incyte PD:2957175] 85. Ubiquitin-like protein [Incyte PD:1754454] 86. Human RGP4 mRNA, complete cds [Incyte PD:617517] 87. Cellular retinol-binding protein [Incyte PD:1612969] 88. Ornithine decarboxylase 1 [Incyte PD:1930235] 89. EST [Incyte PD:3605632] 90. EST [Incyte PD:2057260] 91. ESTs, Weakly similar to CAMP-DEPENDENT PROTEIN KINASE TYPE 2 [Saccharomyces cerevisiae] [Incyte PD:2055611] 92. Human p37NB mRNA, complete cds [Incyte PD:1407110] 93. Human mRNA for suppressor for yeast mutant, complete cds [Incyte PD:2888814] 94. EST [Incyte PD:3142705] 95. ESTs, Weakly similar to K01H12.1 [C.elegans] [Incyte PD:56197] 96. Cell division cycle 2, G1 to S and G2 to M [Incyte PD:1525795] 97. EST [Incyte PD:1794175] 98. EST [Incyte PD:1489557] 99. ESTs, Weakly similar to PROTEIN PHOSPHATASE PP2A, 72 KD REGULATORY SUBUNIT [H.sapiens] [Incyte PD:2379045] 100. CAMP-DEPENDENT PROTEIN KINASE TYPE II-ALPHA REGULATORY CHAIN [Incyte PD:1649731] 101. ESTs, Weakly similar to transcription factor [H.sapiens] [Incyte PD:1637517] 102. ATP synthase, H+transporting, mitochondrial F1 complex, O subunit (oligomycin sensitivity conferring protein) [Incyte PD:2193246] 103. RAS-LIKE PROTEIN TC21[Incyte PD:2505425] 104. Small nuclear ribonucleoprotein polypeptides B and B1 [Incyte PD:2071473] 105. EST [Incyte PD:1922084] 106. Proliferating cell nuclear antigen [Incyte PD:2781405] 107. ESTs, Highly similar to HIGH MOBILITY GROUP-LIKE NUCLEAR PROTEIN 2[Saccharomyces cerevisiae] [Incyte PD:2669174] 108. EST [Incyte PD:1844150] 109. Human mRNA for proteasome subunit HsC10-II, complete cds [Incyte PD:1737833] 110. Homo sapiens mRNA for ST1 C2, complete cds [Incyte PD:3993007] 111. **Human dual specificity phosphatase** tyrosine/serine mRNA, complete cds [Incyte PD:1514573] 112. Human stimulator of TAR RNA binding (SRB) mRNA, complete cds [Incyte PD:2057162] 113. EST [Incyte PD:2507206] 114. H.sapiens mRNA for Ndr protein kinase [Incyte PD:3318571] 115. ESTs, Weakly similar to Grb2-related adaptor protein [H.sapiens] [Incyte PD:1857259] 116. ESTs, Highly similar to Tbc1 [M.musculus] [Incyte PD:1889147] 117. GTPase-activating protein ras p21 (RASA) [Incyte PD:147344] 118. Human mRNA for KIAA0123 gene, partial cds [Incyte PD:1752436] 119. Synteni: YCFR 22 [YC 22.2000.Y] 120. Human non-histone chromosomal protein (NHC) mRNA, complete cds [Incyte PD:1748670] 121. Thioredoxin [Incyte PD:2606240] 122. FATTY ACID-BINDING PROTEIN, EPIDERMAL [Incyte PD:2537805]

123. Proteasome component C2 [Incyte PD:2195309] 124. Homo sapiens heat shock protein hsp40 homolog mRNA, complete cds [Incyte PD:2844989] 125. Human amyloid precursor protein-binding protein 1 mRNA, complete cds [Incyte PD:1663083] 126. Homo sapiens DNA binding protein homolog (DRIL1) mRNA, complete cds [Incyte PD:2538333] 127. Human Has2 mRNA, complete cds [Incyte PD:3602403] 128. EST [Incyte PD:1749678] 129. Homo sapiens golgi SNARE (GS27) mRNA, complete cds [Incyte PD:3279439] 130. ESTs, Weakly similar to UBIQUITIN-ACTIVATING ENZYME E1 HOMOLOG [H.sapiens] [Incyte PD:1710472] 131. Synteni: YCFR 22 [YC 22.2000N] 132. Voltage-dependent anion channel 2 [Incyte PD:2189062] 133. Human rap2 mRNA for ras-related protein [Incyte PD:3334979] 134. Acid phosphatase 1, soluble [Incyte PD:620871] 135. Human clone 23840 mRNA, partial cds [Incyte PD:1830083] 136. Human mRNA for KIAA0008 gene, complete cds [Incyte PD:1970111] 137. H.sapiens mRNA for protein-tyrosine-phosphatase (tissue type: foreskin) [Incyte PD:444957] 138. Human B-cell receptor associated protein (hBAP) mRNA, partial cds [Incyte PD:2545562] 139. ESTs, Highly similar to ring finger protein [H.sapiens] [Incyte PD:2860918] 140. H.sapiens mRNA for CLPP [Incyte PD:2675481] 141. APOPTOSIS REGULATOR BCL-X [Incyte PD:1855683] 142. PROTEASOME COMPONENT C13
PRECURSOR [Incyte PD:2668334] 143. Sorting nexin 1 [Incyte PD:1508407] 144. Human voltage dependent anion channel form 3 mRNA, complete cds [Incyte PD:2051154] 145. H.sapiens mRNA for translin [Incyte PD:986855] 146. Human DEAD-box protein p72 (P72) mRNA, complete cds [Incyte PD:1750553] 147. Ras homolog gene family, member G (rho G) [Incyte PD:1342744] 148. EST [Incyte PD:1377794] 149. Human FEZ2 mRNA, partial cds [Incyte PD:2623268] 150. Human homolog of Drosophila discs large protein, isoform 2 (hdlg-2) mRNA, complete cds [Incyte PD:2203554] 151. ALCOHOL DEHYDROGENASE [Incyte PD:1634342] 152. 3-hydroxymethyl-3-methylglutaryl-Coenzyme A lyase (hydroxymethylglutaricaciduria) [Incyte PD:1695917] 153. ENOYL-COA HYDRATASE, MITOCHONDRIAL PRECURSOR [Incyte PD:2235870] 154. Proteasome (prosome, macropain) subunit, beta type, 6 [Incyte PD:2989852] 155. INTERFERON GAMMA UP-REGULATED I-5111 PROTEIN PRECURSOR [Incyte PD:2211625] 156. Epimorphin [Incyte PD:3438987] 157. H.sapiens RY-1 mRNA for putative nucleic acid binding protein [Incyte PD:1805712] 158. EST [Incyte PD:1905120] 159. KD HOUSEKEEPING PROTEIN [Incyte PD:1819287] 160. Cytochrome c oxidase subunit VIIb [Incyte PD:2060789] 161. EST [Incyte PD:661516] 162. Homo sapiens nuclear VCP-like protein NVLp.2 (NVL.2) mRNA, complete cds [Incyte PD:1445507] 163. EST [Incyte PD:1251588] 164. EST [Incyte PD:1665871] 165. Homo sapiens inositol polyphosphate 4-phosphatase type 11-alpha mRNA, complete cds [Incyte PD:3032739] 166. Homo sapiens arsenite translocating ATPase (ASNA1) mRNA, complete cds [Incyte PD:1666094] 167. Human SnRNP core protein Sm D3 mRNA, complete cds [Incyte PD:1624865] 168. Homo sapiens clone 23777 putative taansmembrane GTPase mRNA, partial cds [Incyte PD:2554541] 169. Homo sapiens regulator of G protein signaling RGS12 (RGS) mRNA, complete cds [Incyte PD:3618382] 170. Human Ki nuclear autoantigen mRNA, complete cds [Incyte PD:1308112] 171. Homo sapiens peroxisomal phytanoyl-CoA alpha-hydroxylase (PAHX) mRNA, complete cds [Incyte PD:4073867] 172. PLACENTAL CALCIUM-BINDING PROTEIN [Incyte PD:1222317] 173. PRE-MRNA SPLICING FACTOR SF2, P32 SUBUNIT PRECURSOR [Incyte PD:1552335] 174. Human clone C4E 1.63 (CAC)n/(GTG)n repeat-containing mRNA [Incyte PD:1928789] 175. Human glioma pathogenesis-related protein (GliPR) mRNA, complete cds [Incyte PD:477045] 176. Homeo box A9 [Incyte PD:459651]

US-PAT-NO: **6436685**

DOCUMENT-IDENTIFIER: US 6436685 B1

TITLE: CSAPTP protein molecules and uses therefor

DATE-ISSUED: August 20, 2002

INVENTOR-INFORMATION:

| NAME | CITY | STATE | ZIP CODE | COUNTRY |
|---|---|---|---|---|
| Acton; Susan L. | Lexington | MA | N/A | N/A |


APPL-NO: 09/ 221448

DATE FILED: December 28, 1998

PARENT-CASE:

This application is a division of U.S. Ser. No. 09/164,193, filed Sep. 30, 1998, now U.S. Pat. No. 6,258,582.

US-CL-CURRENT: 435/196; 435/252.3 ; 435/254.11 ; 435/320.1 ; 435/6 ; 536/23.2

ABSTRACT:

The invention provides isolated nucleic acid molecules, designated CSAPTP nucleic acid molecules, which encode novel protein tyrosine phosphatases. The invention also provides antisense nucleic acid molecules, recombinant expression vectors containing CSAPTP nucleic acid molecules, host cells into which the expression vectors have been introduced, and methods for producing CSAPTP polypeptides.

15 Claims, 10 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 10

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US PATENT NO. - PN:

6436685

Drawing Description Text - DRTX:

FIG. 6 depicts a global alignment between the CSAPTP-2 protein sequence and the

**human dual specificity phosphatase** (SwissProt: P51452) protein sequence. This alignment was generated utilizing the ALIGN program with the following parameter setting: PAM120, gap penalties: -12/-4 (Myers, E. and Miller, W. (1988) "Optimal Alignments in Linear Space" CABIOS 4:11-17). The results showed a 22.5% identity between the two sequences.

Other Reference Publication - OREF:

Ishibashi, T. et. al. (1992) "Expression cloning of a **human dual-specificity phosphatase**" Proc. Natl. Acad. Sci. USA 89(24):12170-12174.

US-PAT-NO: **6420153**

DOCUMENT-IDENTIFIER: US 6420153 B1

TITLE: 18232, a novel dual specificity phosphatase and uses therefor

DATE-ISSUED: July 16, 2002

INVENTOR-INFORMATION:

| NAME | CITY | STATE | ZIP CODE | COUNTRY |
|---|---|---|---|---|
| Meyers; Rachel A. | Newton | MA | N/A | N/A |
| Weich; Nadine | Brookline | MA | N/A | N/A |


APPL-NO: 09/ 704139

DATE FILED: November 1, 2000

PARENT-CASE:

RELATED APPLICATIONS This application claims priority to U.S. provisional application No. 60/185,772 filed on Feb. 29, 2000, the contents of which are incorporated herein by reference.

US-CL-CURRENT: 435/196; 435/252.3 ; 435/320.1 ; 435/325 ; 536/23.1 ; 536/23.2 ; 536/24.1

ABSTRACT:

The invention provides isolated nucleic acids molecules, designated 18232 nucleic acid molecules, which encode novel dual specificity phosphatase family members. The invention also provides antisense nucleic acid molecules, recombinant expression vectors containing 18232 nucleic acid molecules, host cells into which the expression vectors have been introduced, and nonhuman transgenic animals in which a 18232 gene has been introduced or disrupted. The invention still further provides isolated 18232 proteins, fusion proteins, antigenic peptides and anti-18232 antibodies. Diagnostic methods utilizing compositions of the invention are also provided. The invention also provides methods of modulating the differentiation and proliferation of hematopoietic cells (e.g., erythroid cells) utilizing the compositions of the invention. Accordingly, methods of treating, preventing and/or diagnosing erythroid-associated disorders such as anemias, leukemias, and erythrocytosis are disclosed.

15 Claims, 9 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 8

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US PATENT NO. - PN:

6420153

Drawing Description Text - DRTX:

FIGS. 3A and 3B depict alignments of **dual specificity phosphatase catalytic domains (DSPc and dsp.sub.-- 5, respectively) and of human** 18232 amino acid sequence with a consensus amino acid sequence derived from a hidden Markov model using PFAM (FIG. 3A) and SMART (FIG. 3B). The upper sequence is the consensus amino acid sequence (SEQ ID NOs:4 and 5, respectively), while the lower amino acid sequence corresponds to amino acids 18 to 156 of SEQ ID NO:2.

Detailed Description Text - DETX:

In a preferred embodiment, a 18232 polypeptide or protein has a "dual specificity phosphatase catalytic domain" or a region that includes at least about 50 to 200, preferably about 75 to 175, more preferably about 100 to 150, and even more preferably about 120 to 140 amino acid residues and has at least about 70%, 80%, 90%, 95%, 99%, or 100% homology with a "dual specificity phosphatase catalytic domain," e.g., the **dual specificity phosphatase catalytic domain of human** 18232 (e.g., residues 18 to 156 of SEQ ID NO:2).

Detailed Description Text - DETX:

To identify the presence of a "dual specificity phosphatase catalytic domain" in a 18232 protein sequence and to make the determination that a polypeptide or protein of interest has a particular profile, the amino acid sequence of the protein can be searched against a database of HMMs (e.g., the Pfam database, release 2.1) using the default parameters. For example, the hmmsf program, which is available as part of the HMMER package of search programs, is a family specific default program for MILPAT0063 and a score of 15 is the default threshold score for determining a hit. Alternatively, the threshold score for determining a hit can be lowered (e.g., to 8 bits). A description of the Pfam database can be found in Sonhammer et al. (1997) Proteins 28(3):405-420 and a detailed description of HMMs can be found, for example, in Gribskov et al.(1990) Meth. Enzymol. 183:146-159; Gribskov et al.(1987) Proc. Natl. Acad. Sci. USA 84:4355-4358; Krogh et al.(1994) J. Mol. Biol. 235:1501-1531; and Stultz et al.(1993) Protein Sci. 2:305-314, the contents of which are incorporated herein by reference. A search was performed against the HMM database resulting in the identification of a "**dual specificity phosphatase catalytic domain" in the amino acid sequence of human** 18232 at about residues 18-156 of SEQ ID NO:2 (see FIGS. 3A-3B).

Detailed Description Text - DETX:

A nucleic acid molecule of the invention can include only a portion of the nucleic acid sequence of SEQ ID NO:1 or 3. For example, such a nucleic acid molecule can include a fragment that can be used as a probe or primer or a fragment encoding a portion of a 18232 protein, e.g., an immunogenic or biologically active portion of a 18232 protein. A fragment can comprise nucleotides 380 to 796 of SEQ ID NO:1, which encodes a **dual specificity phosphatase catalytic domain of human** 18232. The nucleotide sequence determined from the cloning of the 18232 gene allows for the generation of probes and primers designed for use in identifying and/or cloning other 18232 family members, or fragments thereof, as well as 18232 homologues or fragments thereof, from other species.

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  * * * * * * * * * * * * * STN  Columbus  * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 10:12:00 ON 19 DEC 2002

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COST IN U.S. DOLLARS                                    SINCE FILE      TOTAL
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FULL ESTIMATED COST                                         0.21       0.21

FILES 'MEDLINE, SCISEARCH, LIFESCI, BIOTECHDS, BIOSIS, EMBASE, HCAPLUS, NTIS,
       ESBIOBASE, BIOTECHNO, WPIDS' ENTERED AT 10:12:31 ON 19 DEC 2002
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11 FILES IN THE FILE LIST

=> s dual specificity phosphatase#
FILE 'MEDLINE'
         40222 DUAL
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        133520 SPECIFICITY
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L17          4 (L5 OR DSP)(W)3

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L20          0 (L8 OR DSP)(W)3

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FILE 'BIOTECHNO'
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FILE 'SCISEARCH'
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L26         19 L2 (5A)HUMAN

FILE 'LIFESCI'
        308795 HUMAN
L27          8 L3 (5A)HUMAN

FILE 'BIOTECHDS'
         48476 HUMAN
L28          8 L4 (5A)HUMAN

FILE 'BIOSIS'
       5333041 HUMAN
L29         20 L5 (5A)HUMAN

FILE 'EMBASE'
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L30         15 L6 (5A)HUMAN

FILE 'HCAPLUS'
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L31         33 L7 (5A)HUMAN

FILE 'NTIS'
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FILE 'ESBIOBASE'
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L33         14 L9 (5A)HUMAN
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SEARCH ENDED BY USER

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L37          0 (L14 OR L26) AND PY=<1999

FILE 'LIFESCI'
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FILE 'BIOSIS'
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L40          0 (L17 OR L29) AND PY=<1999

FILE 'EMBASE'
           358 PY=<1999
L41          0 (L18 OR L30) AND PY=<1999

FILE 'HCAPLUS'
          3318 PY=<1999
L42          0 (L19 OR L31) AND PY=<1999

FILE 'NTIS'
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L43          0 (L20 OR L32) AND PY=<1999

FILE 'ESBIOBASE'
           294 PY=<1999
L44          0 (L21 OR L33) AND PY=<1999

FILE 'BIOTECHNO'
       1285558 PY=<1999
L45         11 (L22 OR L34) AND PY=<1999

FILE 'WPIDS'
          6357 PY=<1999
                 (PY=<1999)
L46          0 (L23 OR L35) AND PY=<1999

TOTAL FOR ALL FILES
L47         11 (L24 OR L36) AND PY=<1999

=> fil medl
COST IN U.S. DOLLARS                          SINCE FILE      TOTAL
                                                 ENTRY    SESSION
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FULL ESTIMATED COST                                    14.39      14.60

FILE 'MEDLINE' ENTERED AT 10:15:58 ON 19 DEC 2002

=> s (l24 or l36) and py=<1999 range=2002000000,
         50861 PY=<1999
L48          0 (L13 OR L25) AND PY=<1999

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COST IN U.S. DOLLARS                          SINCE FILE      TOTAL
                                                   ENTRY    SESSION
FULL ESTIMATED COST                                 0.38      14.98

FILES 'BIOTECHDS, HCAPLUS, WPIDS' ENTERED AT 10:16:18 ON 19 DEC 2002
ALL COPYRIGHTS AND RESTRICTIONS APPLY.  SEE HELP USAGETERMS FOR DETAILS.

3 FILES IN THE FILE LIST

=> s (l24 or l36) and wo/pc and 2000-2002/ay
FILE 'BIOTECHDS'
         40222 WO/PC
             0 2000-2002/AY
                 (1900-1902/AY)
L49          0 (L16 OR L28) AND WO/PC AND 2000-2002/AY

FILE 'HCAPLUS'
        287176 WO/PC
        397813 2000-2002/AY
L50         10 (L19 OR L31) AND WO/PC AND 2000-2002/AY

FILE 'WPIDS'
        695237 WO/PC
       1053473 2000-2002/AY
L51          6 (L23 OR L35) AND WO/PC AND 2000-2002/AY

TOTAL FOR ALL FILES
L52         16 (L24 OR L36) AND WO/PC AND 2000-2002/AY

=> dup rem l52
PROCESSING COMPLETED FOR L52
L53          11 DUP REM L52 (5 DUPLICATES REMOVED)

=> d tot

L53  ANSWER 1 OF 11  HCAPLUS  COPYRIGHT 2002 ACS       DUPLICATE 1
TI   Protein and cDNA sequences of a novel human dual
     specificity phosphatase sequence homolog and diagnostic
     and therapeutic uses thereof
SO   PCT Int. Appl., 125 pp.
     CODEN: PIXXD2
IN   Weich, Nadine
AN   2002:293828  HCAPLUS
DN   136:320394
     PATENT NO.        KIND  DATE           APPLICATION NO.  DATE
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PI   WO 2002031132      A2   20020418       WO 2001-US31661  20011010 <--
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             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT,
             RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US,
             UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
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BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
AU 2002011597 A5 20020422 AU 2002-11597 20011010 <--

L53 ANSWER 2 OF 11 HCAPLUS COPYRIGHT 2002 ACS DUPLICATE 2
TI Protein and cDNA sequences of a novel **human dual specificity phosphatase** sequence homologs and uses thereof
SO PCT Int. Appl., 138 pp.
CODEN: PIXXD2
IN Meyers, Rachel A.
AN 2001:731029 HCAPLUS
DN 135:284077

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
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| WO 2001073060 | A2 | 20011004 | WO 2001-US9603 | 20010322 <-- |
| WO 2001073060 | A3 | 20020404 | | |

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RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

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| US 2002065406 | A1 | 20020530 | US 2001-815419 | 20010322 <-- |
| US 2002034807 | A1 | 20020321 | US 2001-816494 | 20010323 <-- |

L53 ANSWER 3 OF 11 HCAPLUS COPYRIGHT 2002 ACS DUPLICATE 3
TI Protein and cDNA sequences of a novel human and mouse protein **DSP -3** with dual-specificity MAP kinase phosphatase activity, and therapeutic uses thereof
SO PCT Int. Appl., 86 pp.
CODEN: PIXXD2
IN Luche, Ralf M.; Wei, Bo
AN 2001:31658 HCAPLUS
DN 134:96286

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
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| WO 2001002582 | A1 | 20010111 | WO 2000-US18207 | 20000629 <-- |

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| WO 2000060092 | A2 | 20001012 | WO 2000-US9185 | 20000407 <-- |
| WO 2000060092 | A3 | 20010104 | | |
| WO 2000060092 | C2 | 20020829 | | |

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| WO 2001002581 | A1 | 20010111 | WO 2000-US10868 | 20000420 <-- |

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EP 1196598 A1 20020417 EP 2000-943359 20000629 <--
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IE, SI, LT, LV, FI, RO

L53 ANSWER 4 OF 11 HCAPLUS COPYRIGHT 2002 ACS DUPLICATE 4
TI Protein and cDNA sequences of a novel human protein **DSP-3** with dual-specificity MAP kinase phosphatase activity, and therapeutic uses thereof
SO PCT Int. Appl., 70 pp.
CODEN: PIXXD2
IN Luche, Ralf M.; Wei, Bo
AN 2001:31657 HCAPLUS
DN 134:96285

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE | |
|---|---|---|---|---|---|
| PI WO 2001002581 | A1 | 20010111 | WO 2000-US10868 | 20000420 | <-- |
| WO 2000060092 | A2 | 20001012 | WO 2000-US9185 | 20000407 | <-- |
| WO 2000060092 | A3 | 20010104 | | | |
| WO 2000060092 | C2 | 20020829 | | | |
| WO 2001002582 | A1 | 20010111 | WO 2000-US18207 | 20000629 | <-- |
| EP 1196598 | A1 | 20020417 | EP 2000-943359 | 20000629 | <-- |

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ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU,
LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE,
SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA,
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RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR,
CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU,
ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU,
LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE,
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IE, SI, LT, LV, FI, RO

L53 ANSWER 5 OF 11 HCAPLUS COPYRIGHT 2002 ACS
TI Protein and cDNA sequences of **human dual specificity phosphatase** (DUSP10) sequence homolog, and uses thereof in therapy, diagnosis, and drug screening
SO PCT Int. Appl., 43 pp.
CODEN: PIXXD2

IN Duecker, Klaus
AN 2001:763202 HCAPLUS
DN 135:314475

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE | |
|---|---|---|---|---|---|
| PI WO 2001077340 | A1 | 20011018 | WO 2001-EP3966 | 20010406 | <-- |
| W: CA, JP, US | | | | | |
| RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR | | | | | |
| EP 1263970 | A1 | 20021211 | EP 2001-936201 | 20010406 | <-- |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR | | | | | |

L53 ANSWER 6 OF 11 HCAPLUS COPYRIGHT 2002 ACS
TI Protein and cDNA sequences of novel **human dual specificity phosphatase** sequence homologs and uses thereof
SO PCT Int. Appl., 143 pp.
CODEN: PIXXD2
IN Meyers, Rachel A.
AN 2001:731028 HCAPLUS
DN 135:284076

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE | |
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| PI WO 2001073059 | A2 | 20011004 | WO 2001-US9477 | 20010323 | <-- |
| WO 2001073059 | A3 | 20020620 | | | |
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| US 2002065406 | A1 | 20020530 | US 2001-815419 | 20010322 | <-- |
| US 2002034807 | A1 | 20020321 | US 2001-816494 | 20010323 | <-- |

L53 ANSWER 7 OF 11 HCAPLUS COPYRIGHT 2002 ACS
TI Protein and cDNA sequences of a novel **human dual specificity phosphatase** and uses thereof
SO PCT Int. Appl., 134 pp.
CODEN: PIXXD2
IN Kapeller-Libermann, Rosana
AN 2001:661622 HCAPLUS
DN 135:223454

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE | |
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| PI WO 2001064911 | A2 | 20010907 | WO 2001-US6177 | 20010227 | <-- |
| WO 2001064911 | A3 | 20020418 | | | |
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| US 6420153 | B1 | 20020716 | US 2000-704139 | 20001101 | <-- |
| EP 1259625 | A2 | 20021127 | EP 2001-914519 | 20010227 | <-- |
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L53 ANSWER 8 OF 11 HCAPLUS COPYRIGHT 2002 ACS
TI Human and mouse c-Jun N-terminal kinase activating phosphatases which activate JNK kinase pathways and their uses
SO PCT Int. Appl., 116 pp.
CODEN: PIXXD2
IN Tan, Tse-Hua; Zhou, Guisheng; Belmont, John W.; Fletcher, Frederick A.; Chen, Alice J.; Jurecic, Roland
AN 2001:229056 HCAPLUS
DN 134:261884

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2001021812 | A1 | 20010329 | WO 2000-US25948 | 20000921 <-- |
| WO 2001021812 | C2 | 20021003 | | |

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| EP 1214422 | A1 | 20020619 | EP 2000-966792 | 20000921 <-- |

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L53 ANSWER 9 OF 11 WPIDS (C) 2002 THOMSON DERWENT
TI System for wirelessly and remotely reading integrating meter of amounts of consumed electric power, water, gas etc.; receives and processes numeric code data transmitted by RF module and transmitting timing code to it.

| | | | | | |
|---|---|---|---|---|---|
| PI | WO 2001048723 A1 | 20010705 (200155)* | EN 44p | G08C019-00 | <-- |

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|---|---|---|---|---|
| AU 2001022324 A | 20010709 (200164) | | | G08C019-00 |
| KR 2001067017 A | 20010712 (200202) | | | G08C019-00 |
| NO 2002002934 A | 20020618 (200260) | | | G08C019-00 |
| EP 1234289 A1 | 20020828 (200264) | EN | | G08C019-00 |

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|---|---|---|---|
| BR 2000016639 A | 20021008 (200277) | | G08C019-00 |

IN HAN, M C; HAN, M G

L53 ANSWER 10 OF 11 HCAPLUS COPYRIGHT 2002 ACS DUPLICATE 5
TI Protein and cDNA sequences of a novel human protein **DSP-3** with dual-specificity MAP kinase phosphatase activity, and therapeutic uses thereof
SO PCT Int. Appl., 60 pp.
CODEN: PIXXD2
IN Luche, Ralf M.; Wei, Bo
AN 2000:725778 HCAPLUS
DN 133:291976

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
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| WO 2000060092 | A2 | 20001012 | WO 2000-US9185 | 20000407 <-- |
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PI
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    WO 2001002581     A1   20010111       WO 2000-US10868  20000420 <--
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    WO 2001002582     A1   20010111       WO 2000-US18207  20000629 <--
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L53  ANSWER 11 OF 11  HCAPLUS  COPYRIGHT 2002 ACS
TI   DSP-1 dual-specificity phosphatase
SO   PCT Int. Appl., 74 pp.
     CODEN: PIXXD2
IN   Luche, Ralf M.; Wei, Bo
AN   2000:646042  HCAPLUS
DN   133:236826
     PATENT NO.        KIND  DATE          APPLICATION NO.  DATE
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PI   WO 2000053636     A2    20000914      WO 2000-US6154   20000308 <--
     WO 2000053636     A3    20010215
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            CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,
            IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,
            MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,
            SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM,
            AZ, BY, KG, KZ, MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
            DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
            CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG


=> log y
COST IN U.S. DOLLARS                          SINCE FILE      TOTAL
                                                 ENTRY    SESSION
FULL ESTIMATED COST                              52.21      67.19

STN INTERNATIONAL LOGOFF AT 10:25:06 ON 19 DEC 2002
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